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News Releases from Region 01

EPA Selects Final Groundwater Cleanup Plan for the Nyanza Waste Dump Superfund Site in Ashland, Massachusetts

08/07/2020

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BOSTON - The U.S. Environmental Protection Agency (EPA), in consultation with the State of Massachusetts, has selected a final plan to cleanup groundwater contamination at the Nyanza Chemical Waste Dump Superfund Site, Operable Unit 2, located in Ashland.

The selected remedy is intended to reduce the concentration of contaminants in groundwater to levels that will be protective of human health for exposure to indoor air, such that the existing vapor mitigation systems are no longer needed, and to minimize the need for controls to protect construction workers during excavation activities.

"EPA is proud to finalize the plan to cleanup groundwater at this Ashland, Massachusetts Superfund site," **said EPA New England Regional Administrator Dennis Deziel**. "EPA has been engaged for many years in investigating contaminants at the Nyanza site and has taken many previous actions to protect people's health by addressing hazardous contamination. This plan means EPA is making good on our commitment to protect the people and communities we serve."

EPA's Final Cleanup Plan for Operable Unit 2 (OU2) Groundwater at the Nyanza Chemical Waste Dump Superfund Site includes the following components:

- Additional studies to identify any additional sources of "dense non-aqueous phase liquid" (DNAPL). Residual DNAPL is believed to be the source of

elevated levels of volatile organic compounds (VOCs) detected within the contaminated groundwater plume.

- Additional DNAPL extraction and recovery if further DNAPL sources are encountered.
- In-situ chemical oxidation (ISCO) treatment of groundwater within the source area to address VOC contamination in deep overburden and shallow bedrock zones.
- Long-term monitoring to evaluate remedy performance in both the source area and the downgradient plume areas of concern.
- Land use restrictions (called "Institutional Controls").

The remedy will include the implementation of the cleanup components and institutional controls described above. The remedy is intended to reduce the concentration of contaminants in groundwater to levels which will be protective of human health for exposure to indoor air such that vapor mitigation systems are no longer required, and to minimize the need for controls to protect construction workers during excavation activities.. The overall remedy will also continue to include periodic reviews at least every 5 years to assess its protectiveness.

EPA calculates the final cleanup remedy for OU2 – including construction, operations and maintenance, and long-term monitoring – to cost approximately \$20.5 million and estimates it will take approximately 5 to 10 years to design and implement.

Background on Nyanza Chemical Waste Dump Superfund Site

EPA added the Nyanza Chemical Waste Dump site to the Superfund Program's National Priorities List (NPL) in 1982. From 1917 to 1978, several companies occupied the Site and manufactured textile dyes and dye intermediates, inorganic colloidal solids, and acrylic polymers. Nyanza, Inc. was the most recent dye manufacturing company to occupy the Site. Chemical wastes were disposed of in various locations on the Site property, and manufacturing wastewater effluent and overflow from an underground concrete vault were discharged into adjacent wetlands and drainageways connected to the Sudbury River. An underground vault, which was removed in 1988, was taken out of service in the 1960s or 1970s but continued to be a source of contamination. VOCs in groundwater at the Site resulted in vapor intrusion issues in the downgradient plume.

Several removal and response actions were performed at the Site between 1987 and 1992. The Site is divided into the following four Operable Units (OUs):

OU1: Consists of the capped landfill, the former Nyanza, Inc. property, and adjacent areas where chemical wastes contaminated with heavy metals, VOCs and SVOCs were disposed. A Record of Decision (ROD) was issued in 1985 and an Explanation of Significant Differences (ESD) was issued in 1992. OU1 cleanup actions were completed in late 1992. In December 2019, construction was completed on a 5.8 megawatts direct current solar photovoltaic system on the landfill cap surface. EPA and MassDEP conditionally approved the request by Ashland Solar LLC to construct and operate the Solar Facility on portions of the Site after extensive review of the proposed project.

OU2: Consists of a groundwater plume that extends from the Site in a north/northeasterly direction toward the Sudbury River. A ROD selecting an interim remedy was issued in 1991, and an ESD was issued in 2006. Systems to mitigate the infiltration of vapors from contaminated groundwater into homes and

other structures in certain areas near the site were installed in 2007; those systems will continue to be operated, maintained, and monitored under the proposed additional cleanup. In 2013, two DNAPL extraction wells were installed to evaluate the ability to extract DNAPL from the Site's source area of contamination.

OU3: Consists of the Eastern Wetland and various drainageways to the Sudbury River, including Trolley Brook, Chemical Brook, Outfall Creek and the Lower Raceway. These drainageways are located between the former Nyanza, Inc. property and the Sudbury River. In 1993, EPA issued a ROD for OU3. OU3 cleanup actions were completed between 1999 and 2001.

OU4: Consists of a 26-mile stretch of the Sudbury River which flows through five towns (Ashland, Wayland, Lincoln, Sudbury and Concord, Massachusetts) and one city (Framingham, Massachusetts) where sediment and fish tissue exhibit mercury contamination. The river was apportioned into ten sections, or "reaches" for purposes of EPA investigations and remedial activities. EPA issued a ROD for OU4 in 2010 and an ESD in 2016. OU4 cleanup actions were completed between 1992 and 2017.

More information:

Further information about the Nyanza Chemical Waste Dump Superfund Site, including past work, the Record of Decision (including a summary of responses to public comments), and other documents related to the site is available at: www.epa.gov/superfund/nyanza.

Pending local health and safety conditions, all site documents are also available for review at the Ashland Public Library, 66 Front Street, Ashland, MA 01721, <https://www.ashlandmass.com/184/Ashland-Public-Library> **EXIT** and at the Framingham Public Library, 49 Lexington Street, Framingham, MA 01702, <https://framinghamlibrary.org> **EXIT**

LAST UPDATED ON AUGUST 7, 2020